

Supplementary Table 1. Primers used for qRT-PCR, genotyping and complementation

Purpose	Gene	Primer name	Sequence 5' to 3'
qRT-PCR	<i>PsaA</i>	PsaA-F	GGCACAAGCATCTCAGGTAA
		PsaA-R	AGCCCAAACAATGGATTCAA
	<i>PsbA</i>	PsbA-F	GGTTACAGATTTCGGGCAAGA
		PsbA-R	AATACCTACTACCGGCAAGC
	<i>PsbB</i>	PsbB-F	CTGCTCTAGTTGCTGGTTGG
		PsbB-R	CGCCCCAAGAATTGGTTATT
	<i>PsbD</i>	PsbD-F	CTTTAGGGGGTTGGTTCACA
		PsbD-R	GCTTCAGGACCCACAGTAA
	<i>PsbE</i>	PsbE-F	TGTCTGGAAGCACAGGAGAA
		PsbE-R	GAGGGCTCCCGAACACAT
	<i>PetB</i>	PetB-F	ATTGGGCGGTCAAAATTGTA
		PetB-R	AGACGGCCGTAAAGAAGAGGT
	<i>AtpB</i>	AtpB-F	ATGAGTGCGACAGAGGGTTT
		AtpB-R	TGTGCGAGTATCGACAGGAC
	<i>NdhB</i>	NdhB-F	TACGAAGGATCTCCCCTCC
		NdhB-R	GCTAAGAATAGCTAGGATTCCAGA
	<i>RbcL</i>	RbcL-F	CACCACAAACAGAGACTAAAGCA
		RbcL-R	CCTGCTTCTTCAGGTGGAAC
	<i>TrnD</i>	TrnD-F	GGGATTGTAGTTCAATTGGTCAGA
		TrnD-R	GACTGACGGGGCTCGAA
	<i>RpoB</i>	RpoB-F	TGCTAAGTTTCCAAAAATTGAAGA
		RpoB-R	CAAATTAATCCCGCGGATAC
	<i>RpoTp</i>	RpoTp-F	GAGCAGGAGGTGAGGATTCA
		RpoTp-R	ACACGTTTCCCTAAGCAATTGC
	<i>Lhcb1.2</i>	Lhcb1.2-F	CATCTGAAGTCCTCGGAAGC
		Lhcb1.2-R	GGAAGTCTCCGGTAAGGTAGC
	<i>Lhcb2.2</i>	Lhcb2.2-F	CTCCCCAAAGCATCTGGTAT
		Lhcb2.2-R	GCTCACGGTCTTAGCGAAT
	<i>SIG1</i>	SIG1-F	TCATAAGTCAAGATTGAAGGATAGATT
		SIG1-R	CAAACGCACATTACTCATAGCC
	<i>SIG2</i>	SIG2-F	TGTGCCCTAAACACAACAA
		SIG2-R	TGCCTGTCTGATATAAGGGAATC
	<i>SIG3</i>	SIG3-F	TCCCAAACAGATTGTTGGTTC
		SIG3-R	CAATAACGAGAGCCAATGTTTA
	<i>SIG4</i>	SIG4-F	TTGTACCTCAAGGAAGGAGCA
		SIG4-R	CTTTTCTCTCGTCTTTTCTACG
	<i>SIG5</i>	SIG5-F	TGAAGGCTCTTCTTGAAGTGAA
		SIG5-R	TTAATAAGTTTGTTCCTTGCAGCTC
	<i>SIG6</i>	SIG6-F	TCCTTCTCTGTAGTGATGCTT
		SIG6-R	TCGTCTCTTAACGCATGTGA
	<i>Actin8</i>	Actin8-F	TTCCAGCAGATGTGGATCTCTA
		Actin8-R	AGAAAGAAATGTGATCCCGTCA
Genotyping	<i>SIG1</i> (SALK_147985c)	985-LP	TGTATTCTGAAACCGGAGTG
		985-RP	ATGATGATTTGGCACTCAAGG
	<i>SIG1</i> (CS371990)	990-LP	GCTTCTACTGAGAAGCCA
		990-RP	TCAATTCTTAAGGATCAT
	<i>LBb1.3</i>	LBb1.3	ATTTTGCCGATTTTCGGAAC
	<i>SIG1</i> (RT-PCR)	SIG1-F	GCTTCTACTGAGAAGCCA
SIG1-R		TCAATTCTTAAGGATCAT	

	<i>Actin8</i> (RT-PCR)	Actin8-F	TTCCAGCAGATGTGGATCTCTA
		Actin8-R	AGAAAGAAATGTGATCCCGTCA
<b>Complementation</b>	<i>SIG1</i> (SALK_147985c)	C-XhoI-F	GCGCGCctcgagATGGCTACTGCAGCTGTT
		C-EcoR1-R	GCGCGCgaattcTCAAGCGTAATCTGGAACA TCGTATGGGTAATTCTTAAGGATCATTGC

Letters in lowercase denote restriction sites. The stop codon is shaded in red and the coding sequence for the HA epitope is highlighted in green.